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ESTIMATED SMALL GRAIN LOSSES FROM RUST IN 2001

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Acreage harvested and yield production records based on 2001 Crop Production Summary, Agricultural Statistics Board, USDA. Loss data are a summary of estimates made by personnel of the State Departments of Agriculture, University extension and research projects, Agricultural Research Service, USDA, and the Cereal Disease Laboratory.

Losses were calculated for each rust as follows:

$$\text{Loss (specific rust)} = \frac{(\text{Production}) \times (\text{Percent loss})}{(100\%) - (\text{Percent loss due to rusts})}$$

Losses were indicated as a trace when the disease was present but no fields were known to have suffered significant losses. When a few fields suffered measurable losses this was reflected as a percent of the state's production. Zeros indicate the disease was not reported in that state during the season. Blanks for stripe rust indicate that the disease was not reported nor does it occur annually in that state. Trace amounts were not included in the calculation of totals and averages.

Please note:

The small grain rust loss reports are maintained on our webpage (<http://www.cdl.umn.edu>). To request a hardcopy E-mail David Long or write to the Cereal Disease Laboratory.

WINTER WHEAT

State	1,000 acres harvested	Yield in bushels per acre	Production in 1,000 of bushels	Losses due to:			
				Stem Rust		Leaf Rust	
				Percent	1,000 bushels	Percent	1,000 bushels
Alabama	70	48.0	3,360	0.0	0.0	T	T
Arkansas	970	52.0	50,440	0.0	0.0	T	T
California	380	70.0	26,600	0.0	0.0	3.0	840.0
Colorado	2,000	33.0	66,000	0.0	0.0	T	T
Florida	9	41.0	369	0.0	0.0	T	T
Georgia	200	53.0	10,600	0.0	0.0	T	T
Idaho	710	73.0	51,830	0.0	0.0	0.0	0.0
Illinois	720	61.0	43,920	0.0	0.0	T	T
Indiana	380	66.0	25,080	0.0	0.0	T	T
Iowa	18	54.0	972	0.0	0.0	T	T
Kansas	8,200	40.0	328,000	*T	T	0.4	1,421.5
Kentucky	360	66.0	23,760	0.0	0.0	1.0	240.0
Louisiana	160	50.0	8,000	0.0	0.0	0.5	40.4
Michigan	560	64.0	35,840	0.0	0.0	T	T
Minnesota	13	29.0	377	0.0	0.0	T	T
Mississippi	225	52.0	11,700	0.0	0.0	1.0	118.2
Missouri	760	54.0	41,040	T	T	1.0	414.5
Montana	870	22.0	19,140	0.0	0.0	0.0	0.0
Nebraska	1,600	37.0	59,200	0.0	0.0	T	T
New Mexico	240	34.0	8,160	0.0	0.0	0.0	0.0
New York	120	53.0	6,360	0.0	0.0	T	T
North Carolina	470	39.0	18,330	0.0	0.0	T	T
North Dakota	80	40.0	3,200	T	T	T	T
Ohio	900	67.0	60,300	0.0	0.0	0.1	60.4
Oklahoma	3,700	33.0	122,100	T	T	0.1	T
Oregon	700	40.0	28,000	0.0	0.0	0.1	28.0
Pennsylvania	160	52.0	8,320	0.0	0.0	T	T
South Carolina	210	43.0	9,030	0.0	0.0	0.0	0.0
South Dakota	370	32.0	11,840	T	T	2.0	244.1
Tennessee	340	54.0	18,360	0.0	0.0	0.5	92.3
Texas	3,200	34.0	108,800	T	T	T	T
Virginia	170	60.0	10,200	0.0	0.0	T	T
Washington	1,750	61.0	106,750	T	T	0.2	216.1
West Virginia	8	58.0	464	0.0	0.0	T	T
Wisconsin	160	65.0	10,400	0.0	0.0	T	T
Wyoming	120	24.0	2,880	0.0	0.0	0.0	0.0
Total of Above	30,903	43.3	1,339,722	T	T	0.27	3,715.5
U.S. % Loss							
U.S. Total	31,295	43.5	1,361,479			2.84	39,214.3

*T = Trace

SPRING WHEAT

State	1,000 acres harvested	Yield in bushels per acre	Production in 1,000 of bushels	Losses due to:			
				Stem Rust	Leaf Rust	Stripe Rust	
				1,000 Percent bushels	1,000 Percent bushels	1,000 Percent bushels	
Colorado	44	72.0	3,168	0.0	0.0	T	T
Idaho	490	68.0	33,320	0.0	0.0	0.0	0.0
Minnesota	1,800	44.0	79,200	0.0	1.0	800.0	0.0
Montana	2,850	23.0	65,550	0.0	0.0	T	0.0
North Dakota	6,900	34.0	234,600	0.0	2.0	4,787.8	0.0
Oregon	175	30.0	5,250	0.0	0.1	5.3	0.0
South Dakota	1,650	39.0	64,350	0.0	3.0	1,990.2	T
Utah	16	49.0	784	0.0	0.0	0.0	
Washington	630	41.0	25,830	*T	0.2	52.8	2.0
Wisconsin	7	44.0	308	0.0	T	T	528.2
Wyoming	6	28.0	168	0.0	0.0	0.0	0.0
Total of Above	14,569	35.2	512,608		7,636.1		538.8
U.S. % Loss			T		1.46		0.10
U.S.Total	14,569	35.2	512,608				

DURUM WHEAT

State	1,000 acres harvested	Yield in bushels per acre	Production in 1,000 of bushels	Losses due to:			
				Stem Rust	Leaf Rust	Stripe Rust	
				1,000 Percent bushels	1,000 Percent bushels	1,000 Percent bushels	
Arizona	87	91.0	7,917	0.0	0.0	-	-
California	81	105.0	8,505	0.0	0.0	*T	T
Minnesota	2	39.0	78	0.0	0.0	0.0	0.0
Montana	495	24.0	11,880	0.0	0.0	0.0	0.0
North Dakota	2,100	26.0	54,600	0.0	0.0	0.0	0.0
South Dakota	24	24.0	576	0.0	0.0	0.0	0.0
Total of Above	2,789	30.0	83,556		0.0	0.0	T
U.S. % Loss				0.0	0.0		
U.S.Total	2,789	30.0	83,556				

*T = Trace

OAT

State	1,000 acres harvested	Yield in bushels per acre	Production in 1,000 of bushels	Losses due to			
				Stem Rust		Crown Rust	
				Percent	1,000 bushels	Percent	1,000 bushels
Alabama	*NA	NA	NA	**T	T	0.5	-
Arkansas	NA	NA	NA	0.0	0.0	0.0	0.0
California	15	60.0	900	T	T	T	T
Colorado	32	60.0	1,920	0.0	0.0	0.0	0.0
Georgia	35	65.0	2,275	0.0	0.0	T	T
Idaho	20	68.0	1,360	0.0	0.0	0.0	0.0
Illinois	40	80.0	3,200	0.0	0.0	T	T
Indiana	16	80.0	1,280	0.0	0.0	0.0	0.0
Iowa	130	70.0	9,100	0.0	0.0	T	T
Kansas	40	53.0	2,120	0.0	0.0	T	T
Louisiana	NA	NA	NA	0.5	-	2.0	-
Michigan	55	64.0	3,520	0.0	0.0	0.0	0.0
Minnesota	210	60.0	12,600	T	T	1.0	127.3
Missouri	20	50.0	1,000	0.0	0.0	0.0	0.0
Montana	60	40.0	2,400	0.0	0.0	0.0	0.0
Nebraska	60	61.0	3,660	0.0	0.0	T	T
New York	80	69.0	5,520	0.0	0.0	T	T
North Carolina	30	56.0	1,680	0.0	0.0	T	T
North Dakota	240	62.0	14,880	0.0	0.0	2.0	303.7
Ohio	85	73.0	6,205	0.0	0.0	0.0	0.0
Oklahoma	10	38.0	380	0.0	0.0	0.0	0.0
Oregon	25	77.0	1,925	0.0	0.0	0.2	3.9
Pennsylvania	115	65.0	7,475	0.0	0.0	0.0	0.0
South Carolina	25	57.0	1,425	0.0	0.0	T	T
South Dakota	130	60.0	7,800	T	T	3.0	271.2
Texas	160	45.0	7,200	0.5	36.4	0.5	36.4
Utah	6	65.0	390	0.0	0.0	0.0	0.0
Washington	12	55.0	660	0.0	0.0	0.0	0.0
West Virginia	NA	NA	NA	0.0	0.0	0.0	0.0
Wisconsin	195	64.0	12,480	0.0	0.0	T	T
Wyoming	28	42.0	1,176	0.0	0.0	0.0	0.0
Total of Above	1,874	61.1	114,531		36.4		742.5
U.S. % Loss				0.03		0.64	
U.S.Total	1,905	61.3	116,856				

*NA = Not Available, therefore not included in loss totals.

**T = Trace

BARLEY

Losses due to:									
State	1,000 acres harvested	Yield in bushels per acre	Production in 1000 of bushels	Stem Rust		Leaf Rust		Stripe Rust	
				Percent	1,000 bushels	Percent	1,000 bushels	Percent	1,000 bushels
Arizona	40	110.0	4,400	0.0	0.0	0.0	0.0	0.0	0.0
California	110	53.0	5,830	0.0	0.0	T	T	2.5	149.5
Colorado	80	107.0	8,560	0.0	0.0	T	T	0.0	0.0
Idaho	670	75.0	50,250	0.0	0.0	0.0	0.0	0.0	0.0
Kansas	8	50.0	400	0.0	0.0	0.0	0.0		
Kentucky	8	85.0	680	0.0	0.0	T	T		
Michigan	18	56.0	1,008	0.0	0.0	0.0	0.0		
Minnesota	145	55.0	7,975	*T	T	T	T	0.0	0.0
Montana	720	41.0	29,520	0.0	0.0	0.0	0.0	0.0	0.0
Nebraska	4	45.0	180	0.0	0.0	0.0	0.0	T	T
North Carolina	18	67.0	1,206	0.0	0.0	T	T		
North Dakota	1,450	55.0	79,750	T	T	T	T		
Oklahoma	**NA	NA	NA	0.0	0.0	0.0	0.0		
Oregon	100	45.0	4,500	0.0	0.0	0.0	0.0	0.1	4.5
Pennsylvania	60	70.0	4,200	0.0	0.0	0.0	0.0		
South Carolina	NA	NA	NA	0.0	0.0	0.0	0.0		
South Dakota	78	52.0	4,056	T	T	T	T		
Texas	NA	NA	NA	0.0	0.0	T	T	0.0	0.0
Utah	65	68.0	4,420	0.0	0.0	0.0	0.0		
Virginia	50	75.0	3,750	0.0	0.0	0.0	0.0		
Washington	420	50.0	21,000	0.0	0.0	T	T	1.0	212.2
Wisconsin	35	52.0	1,820	T	T	T	T		
Wyoming	85	84.0	7,140	0.0	0.0	0.0	0.0		
Total of Above					T		T		366.2
U.S. % Loss				T		T		0.15	
U.S.Total	4,289	58.2	249,590						

*T = Trace

**NA = Not Available, therefore not included in loss totals.

RYE

State	1,000 acres harvested	Yield bushels per acre	Production in 1,000 of bushels	Losses due to:			
				Stem Rust		Leaf Rust	
				Percent	1,000 bushels	Percent	1,000 bushels
Georgia	35	25.0	875	0.0	0.0	*T	T
Illinois				0.0	0.0	0.0	0.0
Indiana				0.0	0.0	T	T
Kansas				0.0	0.0	0.0	0.0
Michigan				0.0	0.0	0.0	0.0
Minnesota				0.0	0.0	T	T
Nebraska				0.0	0.0	0.0	0.0
New York				0.0	0.0	0.0	0.0
North Carolina				0.0	0.0	T	T
North Dakota	10	34.0	340	T	T	T	T
Ohio				0.0	0.0	0.0	0.0
Oklahoma	50	23.0	1,150	0.0	0.0	T	T
Pennsylvania				0.0	0.0	0.0	0.0
South Carolina				0.0	0.0	0.0	0.0
South Dakota	10	35.0	350	0.0	0.0	T	T
Texas				0.0	0.0	0.0	0.0
Virginia				0.0	0.0	0.0	0.0
Wisconsin				0.0	0.0	T	T
**Other States	150	28.4	4,256	0.0	0.0	T	T
Total of Above	255	27.3	6,971				
U.S. % Loss				T	T	T	T
U.S.Total	255	27.3	6,971				

*T = Trace

**Other States include IL, KS, MI, MN, NE, NY, NC, PA, SC, TX, WI

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